DOCKET FILE COPY ORIGINAL

ORIGINA

Before the FEDERAL COMMUNICATIONS COMMISSION Washington, D.C. 20554

	L COMMUNICATIONS COMMISSION Washington, D.C. 20554		PECE
In the Matter of Revision of the Commission's Rules To Ensure Compatibility with Enhanced 911 Emergency Calling Systems))))	CC Docket No. 94-10	OFFICE OF THE SECRETARY SOL

To: Chief, Wireless Telecommunications Bureau

QUARTERLY UPDATE TO REQUEST FOR WAIVER OF SECTION 20.18

Public Service Cellular, Inc. ("PSCI"), by its attorneys, hereby files a quarterly update to its request for rule waiver ("Waiver") of Section 20.18 of the Commission's Rules, pursuant to the FCC's Order released on November 13, 1998. On December 4, 1998, PSCI filed for a waiver of Section 20.18 the Commission's rules regarding the transmission of 911 calls made from TTY devices using digital wireless systems. PSCI requested the Waiver until compliant equipment becomes commercially available. The Commission granted PSCI a temporary waiver of Section 20.18, which went into effect on January 1, 1999.² In order to maintain its Waiver, PSCI must file quarterly updates to show what advances have been made in the development of commercially available equipment. In support thereof, the following is respectfully shown:

List ABCDF

¹In the Matter of Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems, CC Docket No. 94-102, Order, rel. Nov. 13, 1998 ("Order I").

²In the Matter of Revision of the Commission's Rules to Ensure Compatibility with Enhanced 911 Emergency Calling Systems, CC Docket No. 94-102, Order, rel. Dec. 31, 1998 ("Order II"). No. of Copies rec'd (

Order I sets forth specific questions that should be answered in support of waivers of Section 20.18. PSCI submits that these questions relate to the specifications of the equipment that is being developed to provide TTY compatible service, and as such are beyond the scope of information which PSCI alone can provide. Therefore, such questions are more appropriately addressed by PSCI's equipment vendor because the equipment vendor, and not PSCI, is directly involved in developing compliant equipment. To form the basis of extending its Waiver, PSC requested that its equipment vendor provide responses to all information set forth in Order I. The equipment vendor's response is attached hereto as Exhibit A. Based upon the information set forth in Exhibit A, PSCI respectfully requests a waiver of Section 20.18 of the Commission's rules until such time as compliant equipment is available from its equipment vendor.

In accordance with the terms of Order I, on a quarterly basis PSCI will continue to request updated information from its equipment vendor regarding its progress on developing compliant equipment and submit such updates to extend this waiver request. As soon as equipment is

commercially available from its equipment vendor, PSCI intends to comply with Section 20.18 of the Commission's rules.

Respectfully submitted,

PUBLIC SERVICE CELLULAR, INC.

Dated: June 30, 1999

Michael K. Kurtis Susan C. Belardi Its Attorneys

Kurtis & Associates, P.C. 2000 M Street, N.W., Suite 600 Washington, D.C. 20036 (202) 328-4500



Name Albert Jordan Title Director

Title Director
Organization CDMA, 1

CDMA, Product Management

67 Whippany Rd Whippany, NJ 07981

Voice 973-386-8622 Fax 973-386-6633

email albertjordan@lucent.com

April 19, 1999

Subject: Lucent Technologies TTY/TDD Status update

This memo provides a status update on progress that has been made with the Text Telephone Device (TTY) solution for digital wireless systems. Lucent Technologies continues to actively participated in industry and consumer forums focusing on the compatibility of TTY signals and digital wireless systems and has developed promising strategies to solve this difficult problem.

Lucent's in-band TTY/TDD solution consists of some interoperable modifications of the CDMA vocoders. Essentially, the solution consists of detecting and decoding the Baudot TTY/TDD signals at the input to the speech encoder at the transmit side, and then using the bits normally used for transmitting pitch information to transmit decoded characters redundantly to the speech decoder at the receiver. The decoder at the receiver, directed by some special logic, then regenerates the character locally. Simulation results demonstrate that the this solution achieves effectively 0% character error rate (CER) for CDMA channels with as much as 5% FER. The predicted CER for this channel without the algorithm would be in excess of 50%.

This solution has been presented to the CTIA TTY Forum, the CDG, and TIA TR45.5.1.1. It has been well received by all of these forums, and the TIA has granted provisional standard document identifiers (PNs) for an EVRC and a CDMA-13 version of this solution. Lucent has distributed a C-language simulation of the solution incorporated into the TIA's golden EVRC simulation to the TIA for independent member verification and testing.

The next step towards moving the solution ahead is developing partnerships with handset vendors for conducting over the air trials and for the production of handsets. Dialogue with handset vendors has been initiated and to date a partnership has not been established. A number of CDMA carriers have indicated that they would be willing to host a trial in their systems. Such a trial would likely occur in 2H'99.

I plan to keep you informed of progress towards the TTY/TDD solution through our quarterly update on status. Information of general availability and pricing for the network half of the solution will be available in the next two quarters. Because the total solution also involves adoption by handset manufacturers, we cannot speculate when carriers will be able to comply with the mandate.

If you have any questions or concerns, please call Christopher Fernandez on 630 224 7873.

Thank you,

Albert Jordan
Director, CDMA Product Management
Wireless AMPS/PCS
Lucent Technologies